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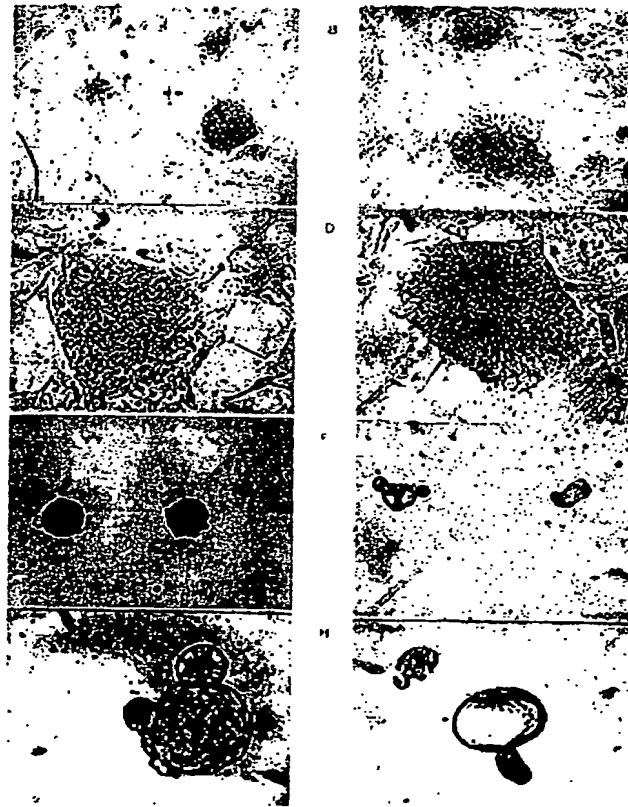
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*[Continued on next page]*

(54) Title: CANINE EMBRYONIC STEM CELLS



(57) Abstract: The invention relates to canine embryonic stem cells, methods of cultivation and propagation of the cells, and production of differentiated cells. The embryonic stem cells may be obtained by isolating a canine embryo, culturing the embryo in the presence of a feeder layer and one or more proliferation agent, removing a blastocyst outgrowth, and culturing the outgrowth in the presence of a fresh feeder layer.

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA2004/000456

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C12N5/06 C12N15/11

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| P, X       | <p>HOUGH MARGARET R ET AL: "Generation of canine embryonic stem cells for use in animal models of human single gene disorders."<br/>         BLOOD,<br/>         vol. 102, no. 11,<br/>         16 November 2003 (2003-11-16), page 150b.,<br/>         XP002296801<br/>         &amp; 45TH ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY; SAN DIEGO, CA, USA;<br/>         DECEMBER 06-09, 2003<br/>         ISSN: 0006-4971<br/>         abstract</p> <p>-----</p> <p style="text-align: center;">-/---</p> | 1-36                  |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

17 September 2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|----------|---|-----------------------|
| P,A      | DENNING CHRIS ET AL: "New frontiers in gene targeting and cloning: Success, application and challenges in domestic animals and human embryonic stem cells." REPRODUCTION (CAMBRIDGE), vol. 126, no. 1, July 2003 (2003-07), pages 1-11, XP002296813<br>ISSN: 1470-1626<br>the whole document<br>----- | 1                     |
| A        | SZABO CSILLA I ET AL: "Human, canine and murine BRCA1 genes: Sequence comparison among species"<br>HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 5, no. 9, 1996, pages 1289-1298, XP002174577<br>ISSN: 0964-6906<br>the whole document<br>-----                                 | 1                     |

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/000456

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple Inventions in this International application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-36

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.